

Engineer sees ancient places on Y2K trips

Nations around the world celebrated the new millennium this New Year's Day. Electric power stayed on all around the globe as clocks moved past midnight on Dec. 31 in successive countries from Fiji and China, to Russia, England and the U.S.

But just a few months before, officials weren't sure that the millennium rollover would go so smoothly. They didn't know if all countries were free of the Y2K bug or if it might trigger major disruptions in many areas. Last year, Brian Furumasu traveled to some east European countries to find out about Y2K readiness and to help on Y2K projects.

Furumasu is a BPA engineer and one of the leading experts on Y2K readiness for electric utilities. He was part of two teams put together for the trips last year.

He first visited Austria and Russia in early 1999 as part of a Department of Energy team. The group gave presentations on nuclear reactor safety in Vienna and then flew to Russia. They gave workshops on how to fix Y2K problems and visited control centers in Russia. (See the March 1999 *Circuit*)



The Y2K team from the U.S. stopped at power projects such as the 650-megawatt Dnieprovskaya Hydro Dam on the Dnieper River, Ukraine.

Furumasu's early trips were very busy with tight schedules. They left little time to visit local sites or view the host country culture. But last fall he took two long trips that gave him time to visit historic sites and see the countries between work stops.

Furumasu traveled to three eastern European countries that were part of the former Soviet Union. "We went to assess the Y2K risks of the power grids in Armenia, Georgia and Ukraine," he says. The clients were

the U.S. embassies in those countries.

"The embassies wanted to know if their lights would stay on when Y2K rolled over," Furumasu says. "Or if they would need to evacuate people from the countries because widespread problems were likely."

The State Department contracted for the work with Southern California Edison. And SCE asked Furumasu to be part of the 10-member team of experts it assembled to survey the three countries.

Furumasu said the team first visited with the energy ministries in each country. "We got briefings and then put together the plans for the various sites to check," he says. "We visited control centers, generation plants, substations and natural gas facilities."

"Most of their systems were built during the Soviet Union era," Furumasu says. "We found many similarities in their systems. Their electric systems are manually operated with almost no digital controls," he says.

The biggest problem of most of the utilities "was having revenues to pay their workers," Furumasu says. "And they typically didn't have enough fuel for generators. They were always short of coal, natural gas, nuclear fuel and heavy oil – which they call masut," he says.

Furumasu says the team concluded that the risk of having a



A fellow Y2K team member snapped Brian Furumasu outside Khor Virap, a 1,500-year-old monastery in Armenia.



Furumasu and other members of the U.S. group stop at an open market in Odesa, Ukraine, on the Black Sea.

power outage because of Y2K was low to very low for each country. They gave their conclusions to the embassy in each country at the end of their work there.

Furumasu says he traveled to the area twice – from late August to late November. "So we saw the changes in the countries from the end of summer to the start of winter," he says. Between the jobs and after their work at each site, the team asked its drivers what would be unique to see in the area.

"In each of the countries we visited, our interpreters and drivers were local people who spoke English very well," Furumasu says. They were typically 10 years or more younger than the members of the team who were in their 40s or 50s. "But they knew their local history well," Furumasu says.

"They were like tour guides in a way."

"Lots of times they would take us to monasteries," Furumasu says.

"What struck me, as we traveled from place to place, was the number of monasteries," he says. "We visited many of them that dated back to as early as the fourth century."

Furumasu says, "I found their stories fascinating about how the churches went underground during the Soviet era and today there is a renaissance in religion, especially among the younger people." The escorts also took the team to museums and other historic sites. One was

the Stalin Museum in Georgia.

Furumasu says all three countries still have economic problems. "It's



Mtskheta, Georgia, where the Kura and Aragvi rivers converge, as seen from the Dzhvari Monastery.

difficult for them to change from a totally socialist system when they



The Americans visit a 750-kilovolt substation in Ukraine.

Photos by Brian Furumasu and others

don't know any other way," he says. Georgia and Armenia are poorer countries, "but they will likely transform into free enterprise quicker," he says. "The governments of these countries are open to that kind of change and are currently taking steps to make that happen."

Armenia and Georgia today cover an area of about 38,000 square miles between the Black Sea and the Caspian Sea. That's just

over one-third the size of Oregon, and it has very little arable land. "But the countryside is breathtaking in both countries," Furumasu says.

Ukraine is a much larger country in the western part of eastern Europe. It covers 233,000 square miles – about the area of Oregon and Montana combined – and was part of the breadbasket of the former Soviet Union. "It has beautiful, fertile farmland as far as you can see," Furumasu says. It also has regions with beautiful landscapes, like the Crimea. And some very beautiful towns like Odesa along the Black Sea and Lviv in the far western part of the country.

The towns and landscape and historic sites weren't the only things good about the countries he visited, Furumasu says. "I really enjoyed the people," he says. "Wherever we went, the people were polite and friendly."

When the team ended its work, "we knew that these areas wouldn't have serious Y2K problems this year," Furumasu says. "And we could hold out hope for the success of these nations as free people in the future." ◀

Dancers perform at HQ

Students from the Jefferson Dancers entertained employees at headquarters on Jan. 19. The Jefferson High School troop performed at noon in the Holladay Auditorium for a Martin Luther King Jr. program.

Under artistic director Steve Gonzales, the group staged a varied program of tap, jazz, modern and traditional African dance. The school and troop have won national acclaim.

The 20 students are in a pre-professional dance-training program at Jefferson High. The teens, ages 13 to 18, audition for the multi-ethnic program in the spring. They study dance and rehearse at least four hours each school day.

The troop also dances for local concerts and other community events during the year. The Jefferson Dancers will perform this May 4-6 at the Portland Center for the Performing Arts. Tickets are available through Fastixx. ◀



Jefferson High School Photo